

to thereby modify the surfaces of particles of powder A,

wherein powder A comprises particles of an oxide of Al, Mg, Ca, Ti, or Si, or particles of a mixed crystal of such oxides, and

wherein powder A comprises particles having a spherical degree of at least 0.7 as defined by the following formula [1]:

spherical degree = (the circumference of a circle having the same area as that of a projection image of a particle)/(the length of the contour of the projection image of the particle) . . . [1].

3. (currently amended): The surface modification method according to claim 2, wherein the combustible gas is any species selected from among methane, ethane, propane, ethylene, propylene, acetylene, butane, LPG, hydrogen, and carbon monoxide; or a gas mixture thereof.

4. (previously presented): The surface modification method according to claim 2, wherein the high-temperature flame is formed by a coaxial triple-tube burner having an innermost tube, an intermediate tube and an outermost tube, in which the powder or powders are passed through the innermost tube, a combustible gas is passed through the intermediate tube and a combustion-supporting gas is passed through the outermost tube.

5. (currently amended): The surface modification method according to claim 2, wherein, in (a), powder A and an ~~organic-inorganic~~ oxide powder B are brought into the flame by spraying them ~~sprayed~~-into the flame together, optionally with a carrier gas.

6. (canceled).

7. (currently amended): The surface modification method according to claim 2, wherein, in (a), a-an inorganic oxide powder B is brought into the flame and comprises particles of an oxide of Al, Ti, or Si, or particles of a mixed crystal of such oxides.

8. (canceled).

9. (previously presented): The surface modification method according to claim 7, wherein the BET-based particle size of powder B is 1/10 or less the average particle size of powder A as measured by means of laser diffraction/scattering particle size analysis.

10. (previously presented): The surface modification method according to claim 7, wherein the amount of powder A is 50 mass% to 99 mass% inclusive on the basis of the total mass of powder A and powder B.

11. (withdrawn) A powder obtained through a surface modification method as recited in claim 6, which has an average particle size of 0.5 μm to 250 μm as measured by means of laser diffraction/scattering particle size analysis.

12. (withdrawn) The powder according to claim 11, which comprises particles having a spherical degree of at least 0.7 as defined by formula [1] described in claim 8.

13. (withdrawn) The powder according to claim 11, which has undergone surface treatment by use of an agent for imparting hydrophobicity to the surface of the powder.

14. (withdrawn) An organic polymer composition characterized by comprising an organic polymer and the powder as recited in claim 11 in an amount of 0.01 mass% to 90 mass% on the basis of the entire mass of the composition.

15. (withdrawn) A silicon-containing polymer composition characterized by comprising a silicon-containing polymer and the powder as recited in claim 11 in an amount of 0.01 mass% to 90 mass% on the basis of the entire mass of the composition.

16. (withdrawn) An organic polymer composition according to claim 14, wherein the organic polymer of the composition is at least one resin selected from the group consisting of a synthetic thermoplastic resin, a synthetic thermosetting resin, and a natural resin.

17. (withdrawn) The organic polymer composition or silicon-containing polymer composition according to claim 14, which is in the form of a compound.

18. (withdrawn) The organic polymer composition or silicon-containing polymer composition according to claim 14, which is in the form of a masterbatch.

19. (withdrawn) A molded product characterized by being formed through molding of the organic polymer composition or silicon-containing polymer composition as recited in claim 14.

20. (withdrawn) A slurry characterized by comprising the powder as recited in claim 11.

21. (withdrawn) A coating agent characterized by comprising the powder as recited in claim 11.

22. (withdrawn) A coating material characterized by comprising the powder as recited in claim 18.

23. (withdrawn) A structure characterized by comprising, on its surface, the powder as recited in claim 11.

24. (withdrawn) The structure according to claim 23, wherein said structure is one selected from the group consisting of building materials, machinery, vehicles, glass products, electric appliances, agricultural materials, electronic apparatus, tools, tableware, bath products, toiletry products, furniture, clothing, cloth products, fibers, leather products, paper products, sporting goods, futon, containers, eyeglasses, signboards, piping, wiring, brackets, sanitary materials, automobile parts, outdoor goods, stockings, socks, gloves, and masks.

25. (withdrawn) A luminescent material comprising the powder as recited in claim 11.

26. (withdrawn) A cosmetic composition comprising the powder as recited in claim 11.

27. (withdrawn) The cosmetic composition according to claim 26, further comprising at least one selected from the group consisting of an oil, a whitening agent, a humectant, an anti-aging agent, an emollient, an extract, an anti-inflammatory agent, an antioxidant, a surfactant, a chelating agent, an antibacterial agent, a preservative, an amino acid, a sugar, an organic acid, an alcohol, an ester, fat and oil, a hydrocarbon, an anti-UV agent, and an inorganic powder.

28. (withdrawn) A method for producing a powder, which comprises a method as recited in claim 2.